

CLAIMS

1. A method for the manufacture of a perforated nonwoven (2), whereby perforation means engage into the nonwoven, the perforation means are arranged on a first roller (8), and the perforation means engage through the nonwoven into a surface (15) of a second roller (10),
characterised in that
the perforation means displace the fibres of the nonwoven, whereby the perforation means engage in a material on the second roller (10), which they can displace during the engagement, *and whereby contours are formed in the material.*
2. The method according to Claim 1, characterised in that the perforation means engage into an at least partially fibrous material, which for preference forms the surface of the second roller (10).
3. The method according to Claim 1, characterised in that the perforation means are heated up to a temperature which is below a melt temperature of the nonwoven or a decomposition temperature of the material.
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4. The method according to Claim 1, 2 or 3, characterised in that a felt material (11) is used.
5. The method according to Claim 4, characterised in that the felt material (11) is located onto the second roller (10) as a shrinkage hose-type covering.
6. The method according to one of the foregoing Claims, characterised in that the perforation means displace the fibres of the nonwoven and push against the material (11), whereby the fibres are compacted and an opening in the nonwoven is stabilised.

7. The method according to Claim 6, characterised in that, when the perforation means engage, fibres are at least in part forced out of the nonwoven, whereby the fibres form a structure which correspondingly exhibits a geometry of the perforation means, which, after the nonwoven has run through the first (8) and second (10) roll, rises from a surface of the nonwoven.
8. The method according to Claim 6 or 7, characterised in that, when the perforation means engage into the material, fibres are at least in part drawn in sympathy into the material.
9. The method according to one of the foregoing Claims, characterised in that the perforated nonwoven (2) is detected.
10. A roll calender (7) for the perforation of a nonwoven, whereby the roll calender (7) exhibits a first (8) and a second (10) roller, the first roller (8) has perforation means which project from a surface of the first roller (8), and the first (8) and the second (10) rollers form a gap (16), through which the nonwoven which is to be perforated is guided, characterised in that the second roller (10) exhibits a material (11) as its surface which can be displaced by the perforation means, whereby the gap (16) is set in such a way that the perforation means engage into the material, *and whereby the contours are formed in the material of the second roller.*
11. The roll calender (7) according to Claim 10, characterised in that the gap (16) is capable of being changed.
12. The roll calender according to Claim 10 or 11, characterised in that the material exhibits fibres at least in part.

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13. The roll calender according to Claim 10, 11, or 12, characterised in that the material exhibits a felt material (11).
14. The roll calender (7) according to Claim 13, characterised in that the felt material (11) exhibits a thickness of at least 6 mm.
15. The roll calender (7) according to Claim 13 or 14; characterised in that the felt material (11) is a shrinkage hose covering.
16. The roll calender (7) according to Claim 13 to 15, characterised in that the felt material (11) is arranged under mechanical tension on the second roll (10).
17. The roll calender (7) according to one of Claims 13 to 16, characterised in that a connection material is applied on the second roll (10), which creates a connection between the felt material (11) and the second roll (10).
18. The roll calender (7) according to one of Claims 10 to 17, characterised in that the second roll (10) is driven.
19. The roll calender (7) according to one of Claims 10 to 18, characterised in that the perforation means are needles (9) which are capable of perforating the nonwoven in such a way as to render it permeable to fluids.
20. The roll calender (7) according to one of Claims 10 to 19, characterised in that a carrier is drawn onto the second roller (10), on which the material (11) *preferably a changeover bobbin,*

is arranged.

21. The roll calender (7) according to one of Claims 10 to 20, characterised in that a detector unit is arranged at the roll calender (7), which detects the perforated nonwoven.

22. The roll calender (7) according to one of Claims 10 to 21, characterised in that the roll calender (7) exhibits a changeover device for changing the second roller (10) which is engaged with the first roller (8) by a third roller.

23. The roll calender (7) according to one of Claims 10 to 22, characterised in that the roll calender (7) exhibits a lateral possibility of access at the second roll (10) for drawing the felt material (11) up and off.

~~24. A material for use on a counter roll of a perforation roll, characterised in that the material exhibits felt material (11), which is located on a carrier.~~

~~25. The material according to Claim 24, characterised in that the material is located on a changeover bobbin.~~

~~26. A use of a felt material (11) as a surface material for a counter roll of a perforation roll.~~

27. A perforated nonwoven manufactured by a method according to Claim 1 and/or with a calender roll (7) according to Claim 10, characterised in that the nonwoven ~~exhibits a basic weight of between 20 g/m² and 40 g/m²~~, has a connecting surface which amounts to between 8 % and 25 %, ~~and exhibits perforations which are approximately circular, whereby a diameter of a perforation is between 0.1 cm and 2.0 cm.~~

~~28. The perforated nonwoven according to Claim 27, characterised in that the nonwoven is a single-layer spunbonded nonwoven, which is at least predominantly manufactured from polypropylene.~~

29. The perforated nonwoven according to Claim 27, characterised in that the nonwoven is a two-layer spunbonded nonwoven, whereby a first layer has a spunbonded nonwoven which exhibits polypropylene; and a second layer exhibits a material which is at least ~~a bi-component material.~~